

Physico-chemical and technological aspects of the use of catalysts during in-situ combustion for the production of high-viscosity crude oils and natural bitumens

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Abstract

© 2015 Springer Science+Business Media New York. A review of recent publications shows rapid development of the in-situ combustion method for the production of high-viscosity crude oils and natural bitumens. Technologies have been developed for application of in-situ combustion after steam-assisted gravity drainage. The use of catalysts is becoming more and more important. We explain the catalytic effect of clays and metals on low-temperature and high-temperature combustion processes.

<http://dx.doi.org/10.1007/s10553-015-0561-5>

Keywords

catalyst, heavy oil, in-situ combustion, steam-assisted gravity drainage